--One embodiment of this invention comprises ceramic support materials coated with chitosan. Nonlimiting examples of ceramic support materials useful herein include alumina and silica (available from Aldrich Chemical Company, Inc., 1001 W.Saint Paul Avenue, Milwaukee, WI 53233-2641, USA and Sumitomo Chemical America, Inc., One California Street, Suit 2300, San Francisco, CA 94111, USA). Perlite is also a support material useful for the practice of the instant invention.--

Please replace paragraph ~~5 on~~ page 8 with the following paragraph:

--Adsorption is a well-developed separation process. Therefore extensive equipment design and development work is not required to use the biosorbent. Traditional adsorption process equipment can be used for the biosorbent-base processes. Any waste stream, containing metals can be treated with the biosorbent. One such waste stream is rinse water from metal plating and finishing operations. The biosorbent can also be used for removing lead, arsenic, mercury and other toxic metals from drinking water resources (e.g. groundwater, water from private bore wells, and etc.). Special waste waters such as mercury contaminated water form dental offices can be treated with a cartridge filled with the biosorbent. Waste waters for nuclear power plants containing cesium, thorium and uranium may also be treated with the biosorbent.--

On page 11, ~~please~~ add the following paragraph after paragraph 6 :

--Figure 6 is a photomicrograph of the biosorbent of the instant invention utilizing perlite as a support material.--

On page 12, ~~after~~ paragraph 5, ~~please add the~~ following paragraph:

A5 -- Figure 6 is a photomicrograph of the composite chitosan biosorbent showing the gross morphology when perlite is utilized as the ceramic support material.--

IN THE DRAWINGS

Please add a new Figure 6. A copy of Figure 6 is attached to this document.

IN THE CLAIMS

Please add new claims 22-~~24~~.

A6 --22. The process of claim 1 wherein said support material comprises perlite.--

--23. The composition of claim 10 wherein said ceramic support material comprises perlite.--

--24. The process of claim 17 wherein said support material comprises perlite.--

REMARKS

The instant patent application has been amended as follows:

On page one after the title and before the first line of text, the following paragraph was inserted:

--This patent application claims the benefit of priority under 35 U.S.C. § 119 of United States Provisional Patent Application No. 60/222,180, filed August 1, 2001. U.S. Provisional Patent Application No. 60/222,180 is incorporated by reference in its entirety.—

This amendment is simply a claim for priority, and therefore no new material has been added to the application.

On page 8, lines 15-16 was amended to recite, "The biosorbent can also be used [to treat drinking water contaminated with heavy/toxic metals such as lead and arsenic] for removing lead, arsenic, mercury and other toxic metals from drinking water resources (e.g. groundwater, water from private bore wells, and etc.)." No new material is presented in this amendment in that the support can be found for lead, arsenic, mercury and other toxic metals on page 6, lines 23-25.

On page 4, line 24, the following sentence was inserted into the specification: "Perlite is also a support material useful for the practice of the instant invention." No new material is presented in this amendment in that perlite is a type of ceramic material. Ceramic materials are adequately disclosed at page 4, lines 20-22 as well as throughout the entirety of the patent application.

On page 11, line 27, the following sentence was inserted into the specification: "Figure 6 is a photomicrograph of the biosorbent of the instant invention utilizing perlite as a support material.". No new material was added with this amendment in that perlite is type of ceramic material. Ceramic materials are adequately disclosed at page 4, lines 20-22 as well as throughout the entirety of the patent application.

On page 12, line 21, the following sentence was inserted into the specification: "Figure 6 is a photomicrograph of the composite chitosan biosorbent showing the gross

morphology when perlite is utilized as the ceramic support material." No new material was added with this amendment in that perlite is a ceramic material. Ceramic materials are adequately disclosed at page 4, lines 20-22 as well as throughout the entirety of the patent application.

Claims 22, 23 and 24 were also newly added by this preliminary amendment. Claims 22, 23 and 24 read:

--22. The process of claim 1 wherein said support material comprises perlite.--

--23. The composition of claim 10 wherein said ceramic support material comprises perlite.--

--24. The process of claim 17 wherein said support material comprises perlite.--

No new material is presented with these new claims in that the patent application in that support for these claims can be found on page 4, lines 20-22.

Kindly consider this preliminary amendment and enter it into the record of this application. Applicant's undersigned attorney may be reached at (314) 552-6443. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

Paul A. Lesko
Registration No. 45,364
Intellectual Property Group
Thompson Coburn LLP
One Firstar Plaza
St. Louis, MO 63101

Attachment: Figure 6